

**CONTINUOUS PROCESS FOR CONTROLLED  
CONCENTRATION OF COLLOIDAL SOLUTIONS**

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**ABSTRACT**

Described is a process for evaporating a portion of a colloidal solution, said process comprising: a) passing a colloidal solution, said colloidal solution comprising particles in a liquid medium, wherein at least a portion of said liquid medium comprises at least one volatile component, through one or more orifices into an evaporation zone that  
10 has at least one inner surface, wherein said colloidal solution does not substantially contact said at least one inner surface of said evaporation zone as said colloidal solution is passed through said evaporation zone; b) applying pressure in said evaporation zone that is lower than the vapor pressure of said colloidal solution as it is passed into said evaporation zone, allowing for flash evaporation of at least a portion of said at least one volatile component  
15 from said colloidal solution; c) adjusting the pressure in said evaporation zone to evaporate an amount of said at least one volatile component from said colloidal solution; and d) collecting the remaining colloidal solution from said evaporation zone.

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